

FIG. 4

FIG. 5B FIG. 5C

FIG. 6

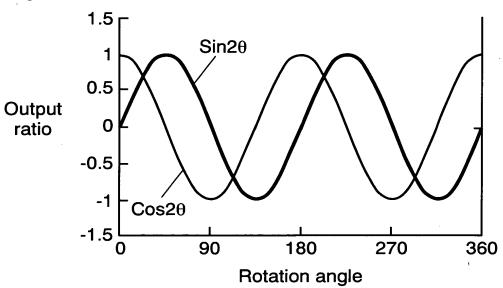


FIG. 7

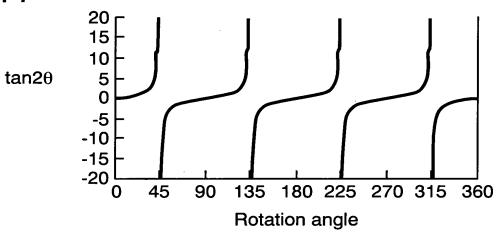
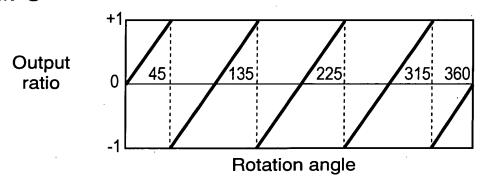


FIG. 8



4/8 FIG. 9

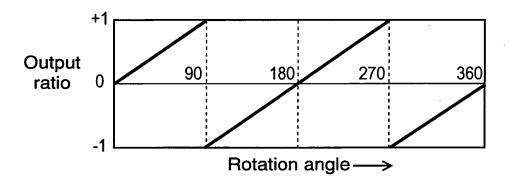


FIG. 10

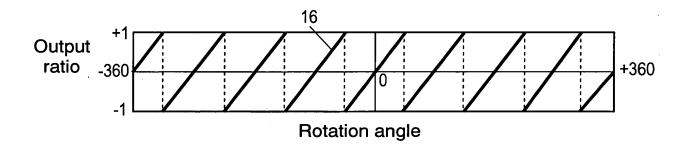


FIG. 11

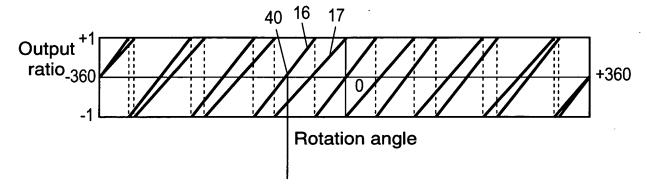


FIG. 12

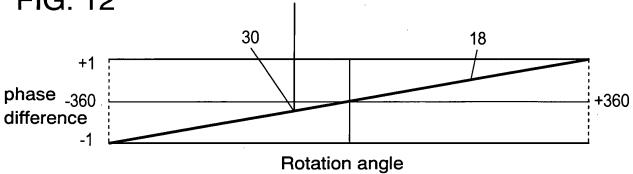


FIG. 13

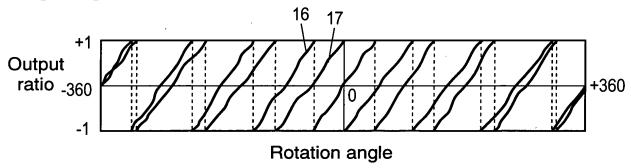
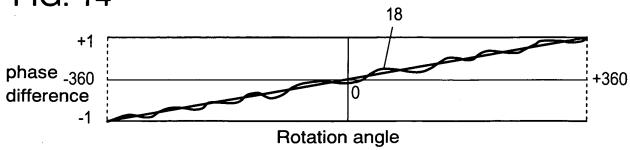


FIG. 14



<sup>6/8</sup> FIG. 15

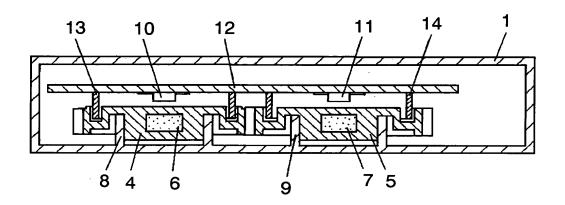
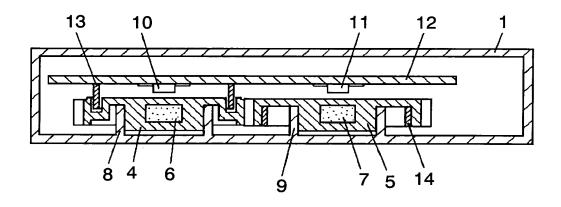


FIG. 16



<sup>7/8</sup> FIG. 17

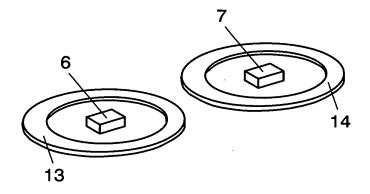


FIG. 18

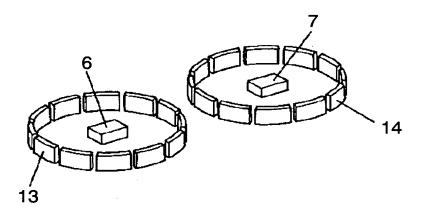
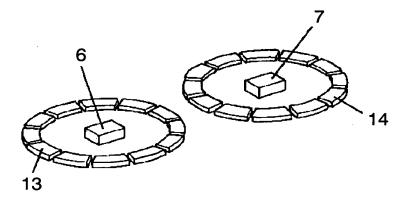


FIG. 19



## Reference marks in the drawings

1: case

2: main rotator

2A, 2B: projection

2C, 4A, 5A: gear

3: steering shaft

3A, 3B: groove

4: first detecting rotator

5: second detecting rotator

6, 7: magnet 8, 9: bearing

10: first anisotropic magnetic resistance element

11: second anisotropic magnetic resistance element

12: circuit board

13, 14: ferromagnetic body

15: magnetic line

16: linear segment indicating the rotation angle of rotator 4

17: linear segment indicating the rotation angle of rotator 5

18: liner segment indicating phase difference between the rotation angles of rotator 4 and rotator 5

20: calculator

30, 40: point